

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

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To:  
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PCT

NOTIFICATION OF TRANSMITTAL OF  
INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT

(PCT Rule 71.1)

Date of Mailing  
(day/month/year)

23 JAN 2006

Applicant's or agent's file reference

IMPORTANT NOTIFICATION

F-8660-PC

International application No.	International filing date (day/month/year)	Priority date (day/month/year)
PCT/US03/32527	15 October 2003 (15.10.2003)	15 October 2002 (15.10.2002)

Applicant

SCIENTIFIC-ATLANTA, INC. A CORPORATION OF THE STATE GEORGIA

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

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## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

## (PCT Article 36 and Rule 70)

Applicant's or agent's file reference F-8660-PC	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US03/32527	International filing date (day/month/year) 15 October 2003 (15.10.2003)	Priority date (day/month/year) 15 October 2002 (15.10.2002)
International Patent Classification (IPC) or national classification and IPC IPC(7): H04 N 7/173, 7/16 and US Cl.: 725/133, 141, 153, 74, 78, 80, 82, 85, 127; 348/734, 825.09, 825.72; 398/106, 135, 107		
Applicant SCIENTIFIC-ATLANTA, INC. A CORPORATION OF THE STATE GEORGIA		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 6 sheets.

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of report with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand 11 May 2004 (11.05.2004)	Date of completion of this report 21 December 2005 (21.12.2005)
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/ US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Authorized officer Ngoc K. Vu Telephone No. 571-272-2600

**I. Basis of the report**

## 1. With regard to the elements of the international application:\*



the international application as originally filed.



the description:

pages 1-13 as originally filed

pages NONE, filed with the demandpages NONE, filed with the letter of \_\_\_\_\_.

the claims:

pages 14-17 as originally filed

pages NONE, as amended (together with any statement) under Article 19pages NONE, filed with the demandpages NONE, filed with the letter of \_\_\_\_\_.

the drawings:

pages 1-8 as originally filed

pages NONE, filed with the demandpages NONE, filed with the letter of \_\_\_\_\_.

the sequence listing part of the description:

pages NONE, as originally filedpages NONE, filed with the demand• pages NONE, filed with the letter of \_\_\_\_\_.

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:



the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).



the language of publication of the international application (under Rule 48.3(b)).



the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:



contained in the international application in printed form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4.  The amendments have resulted in the cancellation of:the description, pages NONEthe claims, Nos. NONEthe drawings, sheets/fig NONE5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/US03/32527

## V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. STATEMENT

Novelty (N)	Claims <u>6-8, 10, 12 AND 14</u>	YES
	Claims <u>1-5, 9, 11, 13 AND 15-21</u>	NO
Inventive Step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-21</u>	NO
Industrial Applicability (IA)	Claims <u>1-21</u>	YES
	Claims <u>NONE</u>	NO

## 2. CITATIONS AND EXPLANATIONS

Please See Continuation Sheet

**Supplemental Box**  
(To be used when the space in any of the preceding boxes is not sufficient)

**V. 2. Citations and Explanations:**

Claims 1-5, 9, 11, 13 and 15-21 lack novelty under PCT Article 33(2) as being anticipated by Hermann et al. (US 4,885,803 A).

Regarding claim 1, Hermann discloses a system for providing a shared device in a networked multimedia system (see figure 1), the system comprising:

a primary device (11) for receiving a plurality of downstream presentations and reverse command signals, and for providing selected presentation signals (host 11 receives a plurality of entertainment signals and control signals and provides selected entertainment signals to remote locations - see figure 1; col. 4, lines 34-37, 49-53 and 66-68; col. 5, lines 55-59);

a peripheral device (15) coupled to the primary device, the peripheral device for providing a media presentation (VCR 15 provides a video program - see col. 4, lines 42-46 and figure 1); and

a plurality of remote devices (31) coupled to the primary device via the networked multimedia system (a plurality of remote devices 31 coupled to host 11 via a cable network 19 - see figure 1), wherein, upon request, the primary device instructs the peripheral device to provide the media presentation (for instance, the host 11 instructs the VCR 15 to provide video program upon request - see col. 5, lines 3-12 and 34-36), and

wherein the primary device provides the selected presentation signals, wherein the selected presentation signals include at least one of the plurality of downstream presentations and the media presentation (the host 11 provides the selected entertainment signals including the video program - see col. 5, lines 36-68).

Regarding claim 2, Hermann discloses that one of the plurality of remote devices 31 transmits a reverse command signal requesting the selected presentation signals (one of devices 31 transmits a control signal requesting the selected entertainment signals - see col. 4, lines 66-68).

Regarding claim 3, Hermann discloses that the reverse command signal is indicative of command operations, and wherein the primary device forwards the command operations to the peripheral device (for example, the host 11 forwards the control signal to VCR 15 which is being controlled - see col. 5, lines 1-7).

Regarding claim 4, Hermann discloses that the command operations comprises record command since VCR can be controlled to operate any trick modes such as play, record, pause, play, stop... etc (see col. 6, lines 33-38).

Regarding claim 5, Hermann discloses that the primary device is coupled to the peripheral device with an IR cable and a sensor (host 11 includes a light-emitting diode 25 within normal operational range of the electronic devices which are being controlled - see col. 4, line 68 to col. 5, line 3), wherein the primary device converts the command operations into IR signals for transmission via the IR cable to the sensor that is located on the peripheral device (for example, the host 11 reconverts the electrical control signals via LED 25 to the VCR 15 - see col. 5, lines 3-7 and figure 1).

Regarding claim 9, Hermann discloses that the media presentation is analog signal (see col. 4, lines 31-37).

## Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Regarding claim 11, it is to be noted that the host 11 inherently comprises a modulator for modulating the selected entertainment signals to a predetermined frequency and providing modulated signals to remote device 31 (see col. 4, lines 37-42; col. 6, lines 29-30 and figure 3).

Regarding claim 13, Hermann discloses a method for providing shared devices in a networked multimedia system, the networked multimedia system including a primary device (11), a splitter/isolation module (SIM) (27), a peripheral device (15), and a plurality of remote devices (21, 23 and 31), the method comprising the steps of:

at least one of the plurality of remote devices,

receiving user input signals that are indicative of a request for a presentation (receiving a control signal via remote control 23 for requesting a selected entertainment program - see col. 4, lines 56-59);

processing the user input signals to determine whether the selected presentation is indicative of one of a plurality of downstream signals and a media presentation that is included in the peripheral device (processing the control signal, e.g., converting the infrared control signals to electrical signals via detector 21, to determine whether the selected entertainment program from one of downstream signals and a video program that is included in the VCR 15 - see col. 4, lines 66-68 and figure 1); and

transmitting the user input signals that are indicative of the media presentation to the primary device via the SIM (transmitting the control signals to host 11 via wallbox 27 - see col. 5, lines 29-33 and figure 1); and

at the primary device,

processing the user input signals (reconverting the electrical control signals to infrared signals via the host 11 - see col. 5, lines 3-4);

instructing the peripheral device to provide the media presentation to the primary device (transmitting the infrared controls signals to the VCR 15 which is being controlled - see col. 5, lines 4-6); and

providing the media presentation to the requesting remote device (the video program from VCR 15 is provided to TV 31 via host 11 - see col. 41-45 and figure 1).

Regarding claim 15, it is to be noted that the host 11 inherently comprises a modulator for modulating the selected entertainment signals to a predetermined frequency and providing modulated signals to remote device 31 (see col. 4, lines 37-42; col. 6, lines 29-30 and figure 3).

Regarding claim 16, Hermann discloses that the user input signals is a play command since VCR can be controlled to operate any trick modes such as play, record, pause, play, stop...etc (see figure 1).

Regarding claims 17 and 18, Hermann discloses that VCR 15 can also record program of the downstream from either SAT 13 or ANT 17 (see col. 6, lines 33-34).

Regarding claim 19, Hermann discloses a broadband communications system for transmitting downstream signals having a downstream frequency range and upstream signals having an upstream frequency range (transmitting downstream signals such as entertainment signals and upstream signals such as requesting for video program or for controlling device - see abstract), the broadband communications system including a headend (e.g., provider or broadcaster - not shown), a communications network (e.g., 19 - see figure 1), and a plurality of receiver networks, a receiver network (as shown in figure 1) comprising:

receiving devices including a primary device (11) and a plurality of remote devices (21, 23 and 31);  
 a splitter/isolation module (SIM) (27) coupled between the primary device (11) and the plurality of remote devices (21, 23 and 31), the SIM (27) for receiving the downstream signals and for providing the downstream signals to the receiving devices (wallbox 27 receives the downstream signals such as entertainment signals and for providing the entertainment signals to the remote locations such as room 1 and 2), and for receiving upstream signals from the receiving devices and for providing the upstream signals to the communications network (wallbox 27 receives upstream signals such as requesting for video program or for controlling device from the remote locations to the cable 19), and for receiving media signals from the primary device and for providing the media signals to the plurality of remote devices (wallbox 27 receives entertainment signals from the host 11 and for providing the entertainment signals to the remote devices TV 31), wherein the media signals include recorded presentation signals and stored presentation signals (the entertainment signals included recorded presentation signals and stored presentation signals by VCR 15), and for receiving command signals from the plurality of remote devices and for providing the command signals to the primary device (receiving control signals from the remote devices 23 and for providing the control signals to the host 11) (see col. 4, lines 31-42, 56-59; col. 5, lines 24-33 and figure 1); and

a peripheral device (15) coupled to the primary device 11) for providing the recorded presentation signals, wherein upon receiving a play command from one of the plurality of remote devices, the primary device routes at least one of the media signals to the requesting remote device (VCR 15 can record programs and provide the recorded presentation signals to the

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

host 11. The host 11 routes the entertainment signals to a particular remote device 31 - see figure 1 and col. 6, lines 33-35; col. 5, lines 1-12 and 45-50).

Regarding **claim 20**, Hermann discloses that the primary device is coupled to the peripheral device with an IR cable and a sensor (host 11 includes a light-emitting diode 25 within normal operational range of the electronic devices which are being controlled - see col. 4, line 68 to col. 5, line 3), wherein the primary device converts the command operations into IR signals for transmission via the IR cable to the sensor that is located on the peripheral device (for example, the host 11 reconverts the electrical control signals via LED 25 to the VCR 15 - see col. 5, lines 3-7 and figure 1).

Regarding **claim 21**, Hermann discloses that the command operations comprises record command since VCR can be controlled to operate any trick modes such as play, record, pause, play, stop... etc (see col. 6, lines 33-38).

Claims 10, 12 and 14 lack an inventive step under PCT Article 33(3) as being obvious over Hermann et al. (US 4,885,803 A).

Regarding **claims 10 and 14**, Hermann discloses the primary device (11) comprising a processor and an encoder and routing the video program to a particular remote device 31 (it is to be noted that the host 11 inherently comprises a processor and encoder to process the downstream signals and upstream signals - see figure 1). Hermann does not explicitly disclose the feature of digitally compressing the analog media presentation prior to routing to the requesting remote device. It is noted that compression technology for compressing data is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify the system of Hermann by compressing the video program prior to routing to the particular remote device for bandwidth conservation purpose.

Regarding **claim 12**, Hermann discloses the primary device (11 - see figure 1) . It is to be noted that the host 11 comprises a storage device, e.g., a memory ROM/RAM. Hermann does not explicitly disclose the storage device for selectively storing presentations from at least one of the plurality of downstream presentations and the media presentation. It is noted that a feature for selectively storing data in a memory is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify the system of Hermann by selectively storing the downstream signals such as entertainment signals in the host 11 for saving the space of the memory.

Claims 6-8 lack an inventive step under PCT Article 33(3) as being obvious over Hermann et al. (US 4,885,803 A) in view of Sampsell (US 6,219,839 B1).

Regarding **claim 6**, Hermann discloses that a user can select a particular electronic devices such as SAT 13 and VCR 15, and transmitting appropriate IR signals to the electronic device being controlled via host 11 (see col. 4, line 68 to col. 5, line 7).

Hermann does not explicitly disclose the user selects one listing from a plurality of listings including manufacturers and models that is indicative of a plurality of peripheral devices. However, Sampsell teaches allowing a user to select a control scheme, including an appropriate set of commands, or control codes, for the peripheral from the host's internal set of control codes. The screen also include "device type" having various selection corresponding to peripherals such as VCR#1, VCR#2, laser disc, DBS, DVD...etc (see col. 8, lines 38-51). Therefore, it would have been obvious to one of ordinary skill in the art to modify the system of Hermann by providing a list including device types and control codes corresponding to the peripheral devices to the user as taught by Sampsell in order to allow the user selectively control a particular peripheral device with visual guide.

Regarding **claim 7**, Hermann does not explicitly disclose an interactive program guide (IPG) that is shared among the primary device and the plurality of remote devices, and wherein the IPG is updated to include a channel for the one selected listing that is indicative of a peripheral device screen. However, Sampsell clearly show in figures 6-9 an ERG 70 including a channel, e.g., reference numerals 84, 96 and 102 in figures 6-9, for showing description of a peripheral device identity or capabilities. For instance, DVD 20 appears as a separate channel on ERG 70, and allows the user to view the DVD programming with the same ease as selecting a broadcast channel (see col. 4, lines 5-10; col. 7, lines 9-45 and figures 6-9). Therefore, it would have been obvious to one of ordinary skill in the art to modify the system of Hermann by providing ERG including a channel for showing description of a peripheral device identity or capabilities as shown by Sampsell in order to allow a viewer to review the content of the programming on the media within peripheral and to control the peripheral so as to view and control the presentation of that programming.

Regarding **claim 8**, the combination teaching of Hermann and Sampsell teaches that wherein a user utilizes the peripheral device screen to generate the reverse command signals (for instance, Sampsell discloses that the user may select a stream and arrange to record the stream using the DVD or VCR OSDs, which are served across the network along with the ERGs - see col. 7, lines 35-37 and figure 10).

## ----- NEW CITATIONS -----

NONE